

IN THE CLAIMS:

Claim 1 (Currently Amended): A silicon-on-insulator semiconductor device comprising:
an insulative layer formed overlying a substrate;
a source region and a drain region formed overlying the insulative layer, the source region and the drain region comprising a material having a first conductivity type;
a body region disposed between the source region and the drain region and overlying the insulative layer, the body region comprising a material having a second conductivity type;
a gate insulative layer overlying the body region;
a gate region overlying the gate insulative layer;
a diode circuit comprising ~~back-to-back~~ ~~back-to-back~~ diodes connected at their anodes
with a first cathode of the back-to-back diodes conductively coupled to the source region; and
a conductive connection coupling the gate region to a second cathode of the back-to-back
diodes ~~the diode circuit~~.

Claim 2 (Original): The device of Claim 1, wherein the conductive connection comprises:

a conductive region formed overlying the gate region; and
a metal trace coupling the conductive region to the diode circuit.

Claim 3 (Original): The device of Claim 2, wherein the conductive region comprises a metallization layer.

Claims 4 - 6 (Canceled)

Claim 7 (Withdrawn): The device of Claim 1, wherein the back-to-back diodes are separated from each other by an insulative region.

Claim 8 (Withdrawn): A silicon-on-insulator semiconductor device comprising:

an insulative layer formed overlying a substrate;

a source region and a drain region formed overlying the insulative layer, the source region and the drain region comprising a material having a first conductivity type;

a body region disposed between the source region and the drain region and overlying the insulative layer, the body region comprising a material having a second conductivity type;

a gate insulative layer overlying the body region;

a gate region overlying the gate insulative layer;

a diode circuit conductively coupled to the source region; and

a conductive connection coupling the gate region to the diode circuit wherein the diode circuit comprises at least three diodes connected in series, each diode having a first region having the first conductivity type and a second region having the second conductivity type, the first region of a first one of the diodes conductively coupled to the source region and the second region of a second one of the diodes conductively coupled to the conductive connection.

Claim 9 (Withdrawn): The device of Claim 1, wherein the source region and the drain region are formed from an n-type material.

Claim 10 (Withdrawn): The device of Claim 1, wherein the source region and the drain region are formed from a p-type material.

Claim 11 (Withdrawn): The device of Claim 1, wherein the insulative layer comprises oxide.

Claim 12 (Withdrawn): A method for reducing charge damage in a silicon-on-insulator

device comprising:

providing a silicon-on-insulator device having a source region and a drain region formed outwardly from an oxide layer, the oxide layer formed on a substrate and also having a gate region;

conductively coupling the source region to a diode circuit comprising at least one diode;
and

conductively coupling the diode circuit to the gate region, thereby allowing charge to flow between the gate region and the source region during fabrication to prevent charge build-up, but preventing charge from flowing between the gate region and the service region during operation of the device.

Claim 13 (Withdrawn): The method of Claim 12, wherein conductively coupling the source region to a diode circuit comprises conductively coupling the source region to a diode circuit having a pair of back-to-back diodes.

Claim 14 (Withdrawn): The method of Claim 12, wherein conductively coupling the source region to a diode circuit comprises conductively coupling the source region to a diode circuit having at least three diodes connected in series.

Claim 15 (Withdrawn): The method of Claim 12, wherein the silicon-on-insulator device further comprises a metallization layer conductively coupled to the gate region, and wherein conductively coupling the diode circuit to the gate region comprises conductively coupling the gate region to the diode circuit by a metal trace.

Claim 16 (Withdrawn): The method of Claim 12, wherein the at least one diode

comprises a single diode oriented with respect to the gate region and the source region

Claims 17 – 20 (Canceled)

Claim 21 (New): The device of Claim 1, wherein the drain region is not conductively coupled to either the source region or the gate region.

Claim 22 (New): The device of Claim 1, wherein the back-to-back diodes are separated from each other by an insulative region.